

ABSTRACT

A method for correcting a color value generated by a forward model for a color input device. A color value generated by the forward model is mapped into a color space. The color value is clipped to a locus of a visual gamut in the color space if the color value falls outside of the visual gamut. Clipping the mapped color value ensures that the color input device generates color values that represent colors within the human visual system. Clipping may be accomplished by clipping a color value to an intersection of a locus boundary and a vector between the color value and a white point. The locus used may be the CIE spectral locus projected into the color space. Any number of standard color spaces may be used in the method, such as CIEXYZ, CIELUV, or CIELAB.